

NUMENIUS PHÆOPUS (L.).

Three Whimbrels passing over Ust Zylma on the 18th May, were whistled round and induced to alight within fifty yards, when all three were secured. These were the only ones we saw during our trip, though one other was heard calling on the following day.

GRUS CINEREA, L.

Only three Cranes were seen passing to the northward, over Ust Zylma, at a great height—one on the 21st May, and two others on the 25th May.

[To be continued.]

XXIX.—*Notes on the Trochilidæ. The Genera Cyanomyia and Heliotrypha.* By D. G. ELLIOT, F.R.S.E. &c.

CYANOMYIA.

The genus *Cyanomyia*, although not remarkable for possessing species resplendent in brilliant metallic colours of many hues, nevertheless contains some sufficiently adorned to excite admiration, while the pure white and glittering blue and green which compose the dress of the various species cannot but afford pleasure to all who see them. It is a genus whose members are restricted to the western portion of South America and Central America, Mexico being its northern limit, and Peru the most southern country from which any specimens have yet been received. The genus contains seven species, some of which, however, cannot be said as yet to be firmly established, or entitled to specific rank, but more as occupying a probationary state, waiting for passports bearing more satisfactory visés than they can at present bear.

The various species seem naturally to form two groups, viz. those having the underparts of the body pure white, without any metallic colouring, and those having the sides of the neck and flanks covered with metallic feathers of different hues. The first of these groups contains three species, two of which, however, may be but local races of the same form; and the four remaining species comprise the second

section. The following table will show the characters of the species :—

A. Entire underparts pure white.		
a. Tail olive-green; top of head metallic blue, sometimes with purple reflections		<i>C. quadricolor.</i>
b. Tail bronzy red; top of head metallic purple, sometimes with blue reflections		<i>C. violiceps.</i>
c. Tail metallic golden, tip bronzy red; top of head dull metallic dark green		<i>C. viridifrons.</i>
B. Breast and abdomen white; flanks metallic green or bronze.		
d. Under tail-coverts greenish grey		<i>C. cyanocephala.</i>
e. Under tail-coverts bronzy red		<i>C. microrhyncha.</i>
f. Under tail-coverts white; top of head blue		<i>C. franciæ.</i>
g. Under tail-coverts white; top of head and nape blue		<i>C. cyaneicollis.</i>

On looking at the geographical distribution of the members of this genus, we find that Mexico contains four species, viz. *C. quadricolor*, inhabiting the northern part, *C. violiceps* and *C. viridifrons*, the western, and *C. cyanocephala*, the southern, this last species extending its range into Guatemala and Honduras. The last-named country is also stated to be the habitat of the bird I describe in this paper as *C. microrhyncha*, though I am not certain that this is the correct locality from which the unique example in my collection came. As we proceed southwards along the western side of South America, we find *C. franciæ* to be a native of Columbia, while Peru is given as the habitat of the form described by Mr. Gould as *C. cyaneicollis*. No member of this genus has yet been met with in Ecuador, so far as I am aware, though it cannot be supposed, if it is represented in both Columbia and Peru, that there is no species of *Cyanomyia* dwelling in the country that lies between these two. In no locality east of the Andean range has any species of this group been found; and Lesson was in error when he gave Brazil as the habitat of *C. cyanocephala*.

CYANOMYIA QUADRICOLOR.

Trochilus quadricolor, Vieill. Enc. Méth. p. 132, pl. 17.

Cyanomyia quadricolor, Bp. Rev. et Mag. Zool. 1854, p.

254; Gould, Mon. Troch. vol. v. p. 284; et Intr. Mon. Troch. p. 147, sp. 313.

Hab. Mexico (northern districts).

This species, a native of Mexico, was first described by Vieillot (*l. c.*). It bears a close resemblance to *C. violiceps*, but may be distinguished from that species by the colouring of the tail, which is a pale olive-green, without any of the bronze-red hue observable on the rectrices of its relative. The top of the head is a blue green, sometimes with purple reflection. In all other respects the two species are very similar. The present bird is rather rare in collections, although it is reasonable to suppose it is common in the districts it inhabits, as are the other species of the genus in the localities they frequent. I have remarked that sometimes the top of the head has purple reflections like that of *C. violiceps*. My knowledge of this fact is obtained from a specimen in my collection which has the colouring of the head like that of typical *C. violiceps*, and, were it deprived of the tail, would undoubtedly be ranked with that species; but the rectrices unmistakably belong to *C. quadricolor*. The colouring of these last, then, appear to be the only character by which the two forms may be distinguished.

CYANOMYIA VIOLICEPS.

Cyanomyia violiceps, Gould, Ann. & Mag. Nat. Hist. 3rd ser. vol. iv. p. 97; Id. Mon. Troch. vol. v. pl. 285; et Intr. Troch. p. 147, sp. 314.

Hab. Mexico, vicinity of Oaxaca (*Sallé*).

This bird, described by Gould (*l. c.*), was procured by M. Sallé near Oaxaca, in Western Mexico, where it appears to be very abundant. Mr. Gould regarded it as distinct from *C. quadricolor* in its "larger and somewhat forked tail, in the violet colouring of the crown, and in having a longer and darker bill, which, moreover, is not so broad at the base." With a tolerably large series of specimens before me, I find that none of these characters are trustworthy, or sufficient to establish the species. The colouring of the head, as I have already stated, when speaking of *C. quadricolor*, varies greatly; the

bill in the adult in both shape and colour cannot be distinguished from that of the previous species ; while I am not able to perceive any material difference in the shape of the tail. The only appreciable distinction between the two forms is, that the tail of the present bird possesses a bronzy red hue, which I have not yet met with in any example of *C. quadricolor*. Should such be found, however, it would seem impossible to continue the two forms as distinct species. I have one specimen from Oaxaca (*Boucard*) which has a deep bluish-green head, exactly similar to that of *C. quadricolor*, but with a bronze-red tail. It will thus be seen how close the two forms are ; and if they are not the same, they are probably but local races of one species.

CYANOMYIA VIRIDIFRONS.

Cyanomyia viridifrons, Elliot, Ann. & Mag. Nat. Hist. 1871, vol. viii. p. 267.

Hab. Putla, Mexico (*Rebouch*).

Three specimens of this species were procured by M. Rebouch at Putla, and described by myself as above. It is between *C. quadricolor* and *C. cyanocephala*, having the flanks a metallic green, like the latter species. It differs from all the known forms of this genus in its dark green head, but slightly metallic, and in its brilliant tail, metallic golden, with a purplish red tip. I have never seen but the three examples mentioned.

CYANOMYIA CYANOCEPHALA.

Ornismya cyanocephala, Lesson, Suppl. Oiseaux-Mouches, p. 134, pl. 18.

Cyanomyia cyanocephala, Gould, Mon. Troch. vol. v. pl. 286 ; et Intr. Troch. p. 147, sp. 315.

Cyanomyia guatemalensis, Gould, Intr. Troch. p. 148, sp. 316.

Hab. Mexico (*Sallé*) ; Guatemala (*Salvin*) ; Honduras (*Taylor*).

Lesson described the present species as the young of *C. quadricolor*, called by him *cyanocephala* ; but both his description and plate are sufficiently accurate to show that it was the present bird he had before him. It has a rather extensive range,

more so than any other member of the genus, reaching from Mexico, in the vicinity of Cordova (where it was procured by M. Sallé), through Guatemala, into Honduras. Mr. Gould, in his Introduction to the monograph of the Humming-birds, separates the bird from Dueñas, in Guatemala, as distinct under the name of *guatemalensis*, although in his monograph he stated that there was not the slightest difference between specimens from Guatemala and Mexico. In the Introduction he characterizes them as follows: "Guatemalan specimens have the tail bronzy green, while the Mexican are olive-green." It is true that in a series of specimens these differences are observable, in a greater or less degree; but it does not seem to me sufficient to entitle the birds from the different localities to a separate specific rank. The difference in the majority of cases is so slight that it would be well nigh impossible to decide to which species the specimens belonged. I have therefore placed the name *C. guatemalensis* as a synonym of *C. cyanocephala**

I have had for some years in my collection a specimen of *Cyanomyia* which differs from all other described species. It was said to have come from Honduras; but for the accuracy of this habitat I cannot vouch. It is nearest to *C. cyanocephala*, but differs in several remarkable and important characters. Although possessing every indication of being an adult individual, it is much smaller than its ally, and has an extraordinarily small bill. In some groups of the Trochilidæ I am well aware that the length of the bill is of no specific value; but I have never seen any material difference in this organ among the adult specimens of the different species of this genus until I obtained the present specimen. Besides its general small size and remarkable bill, the tail and under tail-coverts are very differently coloured, the former being more like that of *C. viridifrons*, though the bird resembles that species in no other manner. Not having been successful in obtaining another specimen, I have decided to describe it, and thus call the attention of ornithologists to the bird:—

* [What is *C. faustina* (Bourc.), Muls. H. N. Ois. M. i. p. 223?—ED.]

CYANOMYIA MICRORHYNCHA.

Top of head and occiput dark metallic blue. Hind neck and mantle shining metallic green ; rest of upper parts bronzy red. Throat, upper part of breast, and centre of abdomen white, with a few metallic-green feathers scattered among the white ones. Flanks and under tail-coverts bronzy red, metallic. Wings dark brown, slightly shaded with purple. Tail brilliant metallic bronze. Total length $3\frac{1}{2}$ inches, wing $2\frac{1}{4}$, tail $1\frac{1}{8}$, bill along culmen $\frac{1}{2}$.

CYANOMYIA FRANCIE.

Trochilus francie, Bourc. Ann. Soc. d'Agricul. et Hist. Nat. Lyon (1846) p. 324 ; et Rev. Zool. 1846, p. 316.

Cyanomyia francie, Gould, Mon. Troch. vol. v. pl. 287 ; et Intr. Mon. Troch. p. 149, sp. 317.

Hab. Columbia.

A native of Columbia, this species appears to be quite common in the vicinity of Bogota, whence numerous examples come to Europe. It is the most brilliant species of the genus, and is closely allied to *C. cyanocephala*, from which it differs chiefly in the white under tail-coverts, and in the greater brilliancy of the sides of the neck and flanks.

CYANOMYIA CYANEICOLLIS.

Cyanomyia cyaneicollis, Gould, P. Z. S. 1853, p. 61 ; Id. Mon. Troch. vol. v. pl. 288 ; et Intr. Troch. p. 149, sp. 318.

Hab. Peru, eastern slope of the Andes (*Warszewiez*).

I only know this form by the two specimens in Mr. Gould's collection. It is certainly very closely allied to *C. francie*, with the blue of the crown extending further down on the nape than in specimens of that species ; but before being able to come to a satisfactory decision as to its specific value it is desirable to see more specimens.

Peru is further south than any of the other members of this genus are known to pass ; and it is not improbable that a different species exists in that country. The type specimens were brought by M. Warszewiez ; and although Peru has been fairly explored by several good collectors since his time, the bird has not again been met with.

HELIOTRYPHA.

Having lately obtained for my collection the type of *Heliotrypha barrali*, Mulsant & Verreaux, a species unknown save by the description published in 1868 by those gentlemen, I was led to examine its relations to the other known species of the genus, with the results now given.

The genus *Heliotrypha* is closely allied to *Helianthus*; indeed at one time the species of both were placed under the latter term, until Mr. Gould, in his monograph of the family, very properly separated the two species *H. viola* and *H. parzudakii* (as given by him, *exortis*, as it should be called) under the generic name by which they are now known. They differ from the species of *Helianthus* conspicuously in not possessing any trace of the white or buff band beneath the metallic feathers of the throat.

The species have but a limited geographical distribution, being confined to districts of Columbia and Ecuador lying on the west of the Andes. The first of these contains *H. barrali*, from the river Saldana, the only locality in which it has been found, so far as known at present, and *H. exortis*, which is plentiful in the vicinity of Bogota, and also extends its range into Ecuador, where it has been obtained near Popayan and near Quito. *H. viola* has, as yet, only been obtained in Ecuador. The following table will serve to distinguish the species, which compose but one group, easily recognizable by their differently coloured throats :—

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|---|--------------------|
| a. Throat metallic purple; chin with light-blue reflections. . | <i>H. viola.</i> |
| b. Throat metallic red; chin deep blue, almost black in some lights | <i>H. exortis.</i> |
| c. Throat pale olive-green | <i>H. barrali.</i> |

HELIOTRYPHA VIOLA.

Helianthus viola, Gould, P. Z. S. 1853, p. 61.

Heliotrypha viola, Gould, Mon. Troch. vol. iv. pl. 241; et Intr. Troch. p. 131, sp. 266.

Hab. Ecuador.

M. Warszewicz was the discoverer of this beautiful species. The specimens he brought came into the possession of Mr.

Gould, by whom they were described as above. It is a very distinct species, and very rare in collections. Although allied to *H. exortis*, it has too many and too striking differences to be confounded with that species.

HELIOTRYPHA EXORTIS.

Trochilus exortis, Fraser, P. Z. S. 1840, p. 14.

Ornismya parzudakii, De Long. & Parz. (nec Less.), Rev. Zool. 1840, March, p. 72.

Heliotrypha parzudakii, Bp. Rev. et Mag. Zool. 1854, p. 254; Gould, Mon. Troch. vol. iv. p. 240; Id. Intr. Troch. p. 131, sp. 265.

Hab. Columbia, Ecuador, Quito (*Jameson*).

This well-known species (familiar to ornithologists as *H. parzudakii*) was described by Fraser in February 1840, in the 'Proceedings' of the Zoological Society, as *Trochilus exortis*, and by De Longuemare and Parzudaki in the 'Revue Zoologique,' in March of the same year, as *Ornismya parzudakii*. The name given by Fraser will therefore stand by right of priority; and although one may regret thus to be obliged to overturn an old established name, yet in the present case the facts are too clear and unanswerable to admit the adoption of any other course, and the species must hereafter be known as *Heliotrypha exortis**.

It is a beautiful species, very common in the vicinity of Bogota, and in collections is generally the sole representative of the genus now under consideration.

I notice that specimens from Ecuador are somewhat larger, with longer bill and wings, while the throat-mark is more restricted to the centre of the throat than in Columbian birds. I do not consider these to be in any way of specific value, or even as elevating the specimens to the dubious rank of a variety.

HELIOTRYPHA BARRALI.

Heliotrypha barrali, Muls. et Verr. Ann. Soc. Linnéenne de Lyon, xviii. p. 106 (1868).

Heliangelus squamigularis, Gould, P. Z. S. 1871, p. 503.

* [Quite clear, certainly, if reading a paper before a scientific meeting is equivalent to publication. But are we all agreed on this point?—ED.]

Hab. Columbia, river Saldana, a branch of the Magdalena, province of Antioquia (*Muls. & Verr.*).

This curious species was described in 1868 by MM. Mulsant and Verreaux from a specimen formerly in the possession of Count Barral. The unique type was unknown to ornithologists generally, save from the description, as no opportunity has been given to examine the bird after it passed from the hands of its describers into its owner's possession. In 1871 Mr. Gould published the description of a supposed new species as *Helian-gelus squamigularis* in the 'Proceedings' of the Zoological Society of London; and it was only after I had been so fortunate as to obtain the type of *H. barrali* for my own collection that it was ascertained to be the same as Mr. Gould's bird. His name will therefore become a synonym of *Heliotrypha barrali*, Muls. & Verr. It is a species remarkable for the peculiar coloration of the throat, which is a brilliant metallic pale olive-green, appearing in some lights not unlike silver, though lacking the pure whiteness of that metal*.

XXX.—Notes on Severtzoff's 'Fauna of Turkestan' (*Turkes-tanskie Jevotnie*). By H. E. DRESSER.

[Continued from p. 191.]

241. *UPUPA EPOPS*, L.; Severtzoff, p. 68.

Horizontal range. Breeds in all four districts, commonly in I., II., and III.

Vertical range. Breeds in districts 1, 2, and 3.

242. *CORACIAS GARRULA*, L.; Severtzoff, p. 68.

Horizontal range. Breeds in districts I., II., III., and IV., at times commonly.

Vertical range. Breeds in districts 1, 2, and 3.

243. *MEROPS APIASTER*, L.; Severtzoff, p. 68.

Range. Similar to that of *Coracias garrula*.

244. *MEROPS PERSICUS*, Pall.; Severtzoff, p. 68.

Horizontal range. Breeds in districts III. and IV.

[* M. Mulsant has recently placed this species in a separate genus, which he calls *Nodulia* (*Cat. des Oiseaux-Mouches*, p. 23).—ED.]